



**QUEEN'S
UNIVERSITY
BELFAST**

The 'New' New Property: Dealing with Digital Assets on Death

Conway, H., & Grattan, S. (2017). The 'New' New Property: Dealing with Digital Assets on Death. In H. Conway, & R. Hickey (Eds.), *Modern Studies in Property Law, Volume 9* (1st ed., pp. 99-115). Hart Publishing, Oxford.
<https://www.bloomsburyprofessional.com/uk/modern-studies-in-property-law-9781782257547/>

Published in:
Modern Studies in Property Law, Volume 9

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
[Link to publication record in Queen's University Belfast Research Portal](#)

Publisher rights
Copyright 2017 Hart Publishing. This work is made available online in accordance with the publisher's policies. Please refer to any applicable terms of use of the publisher.

General rights
Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

The 'New' New Property: Dealing with Digital Assets on Death

HEATHER CONWAY* AND SHEENA GRATTAN**

Death has become more complicated than it used to be, in large part due to the digital age...Yet, the law, still set in the pen and ink era, has failed to keep pace with technology in many contexts, including one's digital footprint at death.¹

I. INTRODUCTION

Over the years, the law of succession has not been immune to the challenges posed by changing circumstances, whether social, economic or familial. In 1981, Professor Mary Ann Glendon published *The New Family and the New Property*,² chronicling, *inter alia*, the move away from traditional property and family forms. Three years later, Professor John Langbein's seminal article entitled 'The Nonprobate Revolution and the Future of the Law of Succession'³ highlighted the challenges posed to traditional succession law rules by alternative wealth forms such as insurance and life policies, joint assets, and pensions. More than three decades later, succession law continues to grapple with both changing family structures and the issues posed by so-called 'will-substitutes'.⁴ However, it now faces another 'New Property Probate Revolution': the legal challenges generated by the so-called 'digital footprint' that virtually every citizen (old and young) leaves behind on death.

As the time of writing, the latest available statistics suggest that almost 3.5 billion people worldwide (around 46% of the global population) are internet users.⁵ With the advent of the digital age, we spend increasing amounts of our time in the virtual world⁶- creating not only an online persona, but leaving a trail of digital

* School of Law, Queen's University Belfast.

** Barrister at Law.

¹ S Varnado, 'Your Digital Footprint Left Behind at Death: An Illustration of Technology Leaving the Law Behind' (2014) 74 *Louisiana Law Review* 719, 719.

² MA Glendon, *The New Family and the New Property* (Butterworths, 1981).

³ J Langbein, 'The Nonprobate Revolution and the Future of the Law of Succession' (1984) 97 *Harvard Law Review* 1108.

⁴ Many legal issues in respect of will-substitutes remain unresolved, including their interplay with traditional succession law doctrines as to the burden of debts and liabilities and estate disputes of any kinds, including claims on foot of the Inheritance (Provision for Family and Dependents) Act 1975.

⁵ 'Internet Users in the World' statistics available at <http://www.internetlivestats.com/internet-users/> (accessed September 2016).

⁶ See for example, J Miller, 'Britons Spend More Time on Tech Than Asleep, Study Suggests', *BBC News Online* (7 August 2014) <<http://www.bbc.co.uk/news/technology-28677674>> (accessed September 2016). As in other countries, internet use in the UK varies according to a range of socio-demographic

assets in our wake. But what actually happens to digital assets when someone dies?⁷ This basic question raises a host of legal issues around ownership, privacy, access to usernames and passwords, and the duties of personal representatives when administering estates, which do not fit neatly within traditional succession law and property law concepts. The location of digital assets also leads to complex multi-jurisdictional legal issues, yet there is currently no 'joined-up' international law on the subject.

This paper looks briefly at digital assets and how they are defined, before examining the challenges posed by this (apparently) new form of property from an estate planning perspective. Arguing that English succession law has so far failed to address these issues, the paper draws on the approach taken in the United States under the Uniform Fiduciary Access to Digital Assets Act and signposts some of the potential issues which any concerted attempt at law reform will have to embrace.

II. DEFINING 'DIGITAL ASSETS': THE INHERENT PROBLEMS

A major difficulty in this area is one of nomenclature: defining 'digital assets' is not straightforward,⁸ and there is no current definition in English law.⁹ Even outside the legal context, standard definitions are equally hard to find; what we have instead are collective descriptors of what typically falls within the realm of digital assets.

Obvious examples include things like emails and email accounts, blogs, social media profiles and accounts (Facebook, Twitter, MySpace and LinkedIn), digital music collections (downloaded from iTunes or similar stores), repositories of digital photographs and videos (beyond those which have been uploaded onto social media sites), and online bank accounts and other financial investments. Online billing arrangements, subscriptions to magazines and gyms, Amazon

factors, including age, gender and geographical location, with the 16-24 age group spending most time online- Office for National Statistics, *Internet Users: 2015* located at <http://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2015> (accessed September 2016). However, a significant proportion of older adults are now internet users, with around 33% of adults aged 75 and over recorded as regular internet users during the first quarter of 2015 (a figure that has been steadily increasing)- *ibid*. Of course, these are the most likely social group to have made a will, which raises the succession law issues we are focusing on in this paper.

⁷ The legal challenges created by digital assets are not, of course, restricted to their transmission on death. The same issues, as well as some others, arise when an individual loses capacity; indeed, the problems with incapacity are arguably more acute in that privacy and confidentiality rights are already fully established for the living. More general forfeiture by non-use of digital assets is another issue that will have to be addressed, as is the application of taxing statutes. However, the focus here will be on death and estate planning.

⁸ The same difficulties arise when trying to define what constitutes an individual's 'digital estate'.

⁹ This may change in the future, in the same way as a broad legal descriptor has been introduced in the United States- see Pt V below.

accounts and Ebay seller profiles, as well as other registered shopping sites and loyalty schemes are also digital assets, as are business information lists (for example, client details and purchasing profiles) and domain names which an individual may have registered.¹⁰ In effect, any files stored or generated on digital devices¹¹ are treated in this way. Several problems are immediately apparent. First, there is the seemingly endless list of things that can constitute a digital asset.¹² Secondly, the value attached to specific types of digital assets will differ immensely; some (for example, bank accounts, financial investments, and domain names) will have an obvious monetary worth, while others (such as photographs, emails and social media profiles¹³) have a purely emotional or sentimental value to the deceased's surviving relatives.¹⁴ Thirdly, there is the issue of how to categorise digital assets, and the implications that this has. These problems all come to the fore in the succession law context, and are discussed at various stages throughout the following sections.

III. DIGITAL ASSETS IN THE SUCCESSION LAW CONTEXT: THE CONCEPTUAL CHALLENGES

Hopkins has noted that '[t]he digitalization of traditional assets has resulted in large amounts of wealth...being stored online, on digital devices, and in the cloud'.¹⁵ When we think of generating wealth, an instinctive thought of a common law property lawyer is its transmissibility on death. However, digital assets pose a unique set of conceptual challenges, which succession law- in its current guise- may struggle to deal with. At the outset, it must be stressed that we cannot conceptualise all of these as succession law issues; yet, it is in this particular legal setting that the question of what *happens* to digital assets comes to the fore.

¹⁰ Other slightly more esoteric examples include online gambling accounts and digital memorials. The latter raise all sorts of issues around who 'owns' and controls someone's post-mortem identity when it comes to memorialising the dead- see H Conway, *The Law and The Dead* (Abingdon, Routledge, 2016) ch 8.

¹¹ Usually computers, tablets, mobile telephones, smartphones and any similar digital device- though more examples will doubtless emerge as technology develops. At the risk of stating the obvious, however, the actual device on which the asset is stored or generated is *not* a digital asset.

¹² As Beyer and Cahn have pointed out, '[t]he list of what a client's computers can hold is, almost literally, infinite'- GW Beyer and N Cahn, 'Digital Planning: The Future of Elder Law' (2013) 9 *National Academy of Elder Law Attorneys Journal* 135, 138.

¹³ Unless they belong to high-profile individuals such as celebrities or leading politicians.

¹⁴ 'Most digital assets are not inherently valuable, but are valuable to family members who extract meaning from what the deceased leaves behind'- Beyer and Cahn (n 12) 140. However, a recent report published by The Co-operative Funeralcare suggests that the average UK adult has accumulated personal digital capital worth £275 (though this seems like a rather conservative estimate!), creating a total of £17 billion left in cyberspace when we factor in the 500 million online accounts and assets which currently exist throughout the UK- *Death in the Digital Age: Three Quarters of UK Adults Unprepared for Life After Death Online* (February 2015), located at <http://www.co-operativefuneralcare.co.uk/about-us/our-news/death-in-the-digital-age/> (accessed September 2016).

¹⁵ JP Hopkins, 'Afterlife in the Cloud: Managing a Digital Estate' (2013) 5 *Hastings Science and Technology Law Journal* 209, 221.

While there are multiple ways to categorise digital assets,¹⁶ the most fundamental distinction for present purposes is what constitutes property (since this is what succession law channels between individuals and across generations) and what does not. Not all digital assets are property in the traditional sense of the word, a fact that is often lost on both lawyers and non-lawyers alike. Instead, the single, most important factor will be the terms of the individual service agreement that the account holder entered into with the relevant service provider. The original contractual arrangement may have generated a digital asset in the sense of a distinct item of property which is transferable or, alternatively, a mere licensing agreement which expires on the death of the individual.¹⁷ If the former, it is simply a new variant of intellectual property, albeit one that does not necessarily 'behave' according to a specific set of legal rules.¹⁸ If the latter, the 'asset' does not fall within what is traditionally understood as the jurisdiction of a testator.¹⁹ Individual service providers will also have different policies about what happens to an individual's online persona and digital assets on death: there is no standard distributional model,²⁰ and (under the terms of the agreement) the same policies can be reviewed and unilaterally altered by the service provider without prior consultation.²¹

In short, what sets digital assets apart from other types of property is the fact that the account holder, the person who we would class as the 'owner' of the digital asset, does not necessarily control their ultimate fate. Attempts to bequeath such assets (or, more likely, authorise access) ignore the fact that the private contractual arrangement with the online service provider, which the individual in question agreed to with little thought for the post-mortem implications, may prohibit this. In an article written in 2014, Natalie Banta noted that digital assets 'all have one striking similarity': their 'inheritability' is controlled by the terms

¹⁶ For example, Beyer and Cahn suggest four broad categories of personal, social media, financial and business- Beyer and Cahn (n 12) 137-138.

¹⁷ In addition, various subcategories of property can exist within the same arrangement. For example, a person's email account may be maintained under a licensing arrangement with the service provider, but the actual email messages attract the same property and copyright laws as letters written on paper.

¹⁸ And the intangible classification might not be as unassailable as we initially think; as Connor points out, only 'digital assets have the unique potential to change from an intangible asset to a tangible one'- J Connor, 'Digital Life After Death: The Issue of Planning for a Person's Digital Assets After Death', *Texas Tech School of Law Legal Studies Research Paper* (No 2011-02) 4.

¹⁹ This is not a new concept; there are obvious analogies with dead hand control over property (see AJ Hirsch and WK Wang, 'A Qualitative Theory of the Dead Hand' (1992) 68 *Indiana Law Journal* 1) and an individual's attempts to control the posthumous fate of their remains by setting out funeral instructions (see Conway (n 10) ch 5).

²⁰ We return to this theme in Pt IV.

²¹ 'In the realm of transmission of assets on death, this is unsatisfactory as it means the "rules" vary from site to site, are unclear to users, fail to take account of stakeholder interests and may change on a whim'- L Edwards and E Harbinja, "What Happens to My Facebook Profile When I Die?": Legal Issues Around Transmission of Digital Assets on Death' in C Maciel and V Carvalho Pereira (eds), *Digital Legacy and Interaction* (Springer International Publishing, 2013).

of service contract, which typically 'limit the descendability and devisability of digital assets'.²² According to Banta, this 'threatens the very nature of...succession law by allowing parties to opt out of one of the most fundamental rights of property- the right to devise',²³ and in doing so strikes at the heart of our traditional understandings of personal property and ownership. Highly critical of this approach, she conceded that provisions limiting the transmission of digital assets were probably not open to challenge on basic principles around formation of contracts, given the full disclosure of the relevant terms, and the user's express agreement when he/she signs up to the service.²⁴ However, Banta went on to argue that contracts which severely restrict or prohibit an individual's right to transfer his/her digital assets should be void as a matter of public policy because:

Private contracts controlling digital assets are not aimed at distributing digital assets according to an account holder's testamentary intent. Instead of abiding by the principles of succession law, companies, through carefully drafted contracts, determine whether assets...are devisable by an account holder or are subject to company control and subsequently deleted or destroyed. We are allowing contracts to divest us of the ability to control our digital property and to redefine our property interests in digital assets.²⁵

Whether courts subsequently accept this invitation, if such agreements are challenged on this basis in the future, remains to be seen.²⁶ However, other writers have also argued that 'management, ownership, or destruction of these assets [should be] based on the foundational principles of deference to the individual's intent'.²⁷ In short, the law should extend the same rights and freedoms to digital assets that it does to most other forms of personal property: an individual should have decision-making powers over their ultimate fate. Yet such comments overlook the fundamental point that not all digital assets can be classed as property; and even those that are may be incapable of being passed on.

²² NM Banta, 'Inherit the Cloud: The Role of Private Contracts in Distributing or Deleting Digital Assets at Death' (2014) 83 *Fordham Law Review* 799. See also Beyer and Cahn (n 12) 136, the authors also making the point that 'the policies of Internet providers often preclude the exercise of individual autonomy'.

²³ Banta (n 22) 803.

²⁴ Ibid, 821 and even though the 'contracts are not negotiated, the terms concerning inheritance are not clear and conspicuous, and there is little alternative choice for users' (ibid, 822) who must signify that they accept all the company terms and policies before they can continue (what Banta refers to as the 'take-it-or-leave-it' nature of digital asset contracts- ibid).

²⁵ Ibid, 826. See also Hopkins (n 15) 241: 'The right to own and pass property at death has been a vital property right in the U.S. legal system for hundreds of years and should not be destroyed by the digital nature of assets'. Although both authors are writing in the US context, the same basic arguments would apply in the UK and in other legal jurisdictions where the concept of private property embraces the core values of transmissibility and testamentary freedom.

²⁶ Hopkins (n 15) 241 posits the idea of legislation which simply prevents service providers from any attempt to destroy the right of transmissibility in digital assets on death- arguing that this would also benefit service providers who would have fewer inactive and dormant accounts.

²⁷ Beyer and Cahn (n 12) 136.

Not all forms of property are inherently transmissible, a concept which is sometimes difficult for those from a common law property law background to appreciate. Many private citizens assume that, because they 'own' something, they have the right to bequeath it.²⁸ Problems arising from the digital estate have echoes with the situation whereby essentially EU concepts such as milk quota or Single Farm Payment (and now, the Basic Farm Subsidy) have to be married with common law inheritance concepts. The leading decision on milk quotas, that of the English Court of Appeal in *Harris v Barclay's Bank*,²⁹ underlines the point that such EU concepts are *sui generis*, creatures of EU regulations and that there is little to be gained from the metaphysics of engaging in an analysis which attempts to classify them and from whence they derive according to common law property concepts. To underline a point made elsewhere in this paper,³⁰ those of us from a common law background (where there is often the attendant assumption that English is the only language of legal literature) have to address multi-jurisdictional dimensions more than ever before.

Something else that should be borne in mind is the fact that different types of digital asset will trigger very different types of post-mortem 'need' or preference. While some digital assets fit squarely within the traditional succession law narratives of reallocating property (for example, digital photographs and videos; Bitcoins), transmissibility is not the only option here. With things like email and social media accounts, both the individual and his/her survivors are more likely to be concerned about ensuring post-mortem access or terminating the account on the individual's death,³¹ than who 'owns' the asset. This has prompted Brubaker and other to propose a 'stewardship' model for things like social network sites, whereby a nominated steward would mediate the deceased's wishes and their data, as well as moderating the needs and requests of the deceased's family and on-line friends who have an ongoing and active interest in things like the deceased's Facebook account and virtual persona.³² Of course, this raises questions of access following the account-holder's demise, and the need for forward planning. While failure to disclose passwords and login details raises the spectre of digital assets

²⁸ Numerous examples exist in the land law context- for example, life estates and property interests held under a joint tenancy.

²⁹ [1997] 2 EGLR 15.

³⁰ See Pt V.

³¹ We cannot simply assume that everyone wants their digital assets to be passed on or managed by someone else after that person's demise. An account holder who has digital assets of a private nature may want these to be destroyed and should take active steps to ensure this happens- just in the same way as an individual might ask someone they trusted to destroy physical material of a similar nature. We return briefly to this in Part IV below.

³² See JR Brubaker, L Dombrowski, AM Gilbert, N Kusumakaulika and GR Hayes, 'Stewarding a Legacy: Responsibilities and Relationships in the Management of Post-Mortem Data' in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (ACM, 2014) 4157. In proposing this scheme, the authors were influenced by the fact that inheritance models presume an heir, which is not necessarily the case here.

floating around in cyberspace for all eternity (and renders the account holder vulnerable to identity theft long after their demise³³), disclosing these details can breach the terms of service agreement with the service provider.³⁴ And even when an individual is encouraged to make an inventory of accounts and usernames to facilitate their access by others, 'it does not necessarily mean that they have passed on the legal right to use the account and all the information contained therein'.³⁵

In short, digital assets bring a distinct set of legal rules into play, as we enter the collective realms of intellectual property law and contract law, as well as privacy laws and rights of access. The fact that succession law cannot pass lots of digital assets because they are not regarded as transmissible property is not actually a succession law problem, as we noted earlier in this section. However, it is a problem for succession lawyers, because even if testators and their families begin to understand that many digital assets are mere licences that cannot be passed on because of the terms of the contract that the testator initially entered into,³⁶ the issues around distributing, managing and (in some cases) terminating these assets will 'bite' on the death of the account holder. It is naive to suggest otherwise, or simply to advise people that a loved one's financial or personal legacies³⁷ cannot be passed on or dealt with in an appropriate manner, simply because they exist in a digital medium and do not adhere to traditional rules. Succession law may simply have to adapt and develop effective solutions, as the difficulties in accessing digital assets and disputed claims over who controls them following an individual's demise bring these issues into the legal arena and strengthen the case for forward planning.³⁸

IV. DIGITAL ASSETS IN THE CURRENT ESTATE PLANNING CLIMATE

³³ Most of the literature highlights the problems which can arise if digital assets are simply floating around, making them accessible to the 'wrong' person and vulnerable to post-mortem identity theft- see for example, Connor (n 18) 5. Of course, the situation is complicated by the fact that, to guard against identity theft, account holders are encouraged to use different passwords for different services, and to change and update these in the event of any perceived threat (or even on a regular basis).

³⁴ Likewise, if the person in possession of the password or username simply uses these to access the site and locate the asset, or terminate the service, then that person runs the risk of committing a cybercrime by misrepresenting who they are to the service provider.

³⁵ Connor (n 18) 6.

³⁶ In other words, we deal with the 'problem' that succession law does not recognise digital assets as property by tackling and correcting the common perception that it does- and the only way to address this issue is by educating lawyers and private citizens more generally.

³⁷ As with other items of personal property, digital assets can have both emotional value and monetary worth. We return to this in the following section.

³⁸ One option might be a legal requirement for service providers to give something more than a licence when the individual pays for specific material (for example, music downloads); another would be to introduce specific rules around management of and access to the asset on death. The first suggestion would be much harder to achieve, because it requires a fundamental change to our legal system and wholesale re-writing of terms of service agreements. The second suggestion, which (as discussed in Pt IV) is not just about the passing on of assets but also about dealing with liabilities and other 'loose ends', is a much more realistic goal.

While planning for bricks-and-mortar and tangible personal property is a well-established process, currently relatively few citizens address the devolution or distribution of their post-mortem digital estate or plan for their digital afterlife.³⁹ Digital assets are gradually replacing stored documents, photo albums, written letters and music collections as personal mementos which people traditionally pass on to their family and loved ones. Estate conflicts are just as likely here, as the locus of the dispute simply shifts elsewhere. Fighting, for example, over digital photograph albums, email accounts and online financial investments or business assets raises the same fundamental issues as other items of personal property; these issues just manifest themselves in a different way.

Even among lawyers it would appear that incorporating digital assets within general succession planning has been the exception rather than the norm.⁴⁰ According to Connor, 'the biggest problem facing not only estate planners, but their clients as well, is a general lack of knowledge about how to properly prepare for what will happen to their digital assets after death'.⁴¹ This is not the only obstacle to negotiate. As has been noted already, the concept of digital 'property' is multifarious in nature. The list of digital assets is constantly evolving and mutating,⁴² creating its own problems from an estate planning perspective and any legal structures which are developed will have to be sufficiently flexible to accommodate the rapid changes in technological progress.

From the perspective of the legal practitioner the most obvious classification is those assets which have an economic or income generating value, and those with purely a dignitary, personal or non-economic benefit. The second category raises entirely different legal challenges to the first, and generally falls outside the remit of the traditional property or probate lawyer.⁴³ Moreover, it is perhaps not surprising that these non-commercial aspects of the digital footprint generated so little interest in the early years of the digital age: Facebook, for example, was created by and for young college students, who presumably did not have the death of a network user as a core feature of the development phase. The immutable reality is that practising succession lawyers will give little attention to 'sentimental' assets with minimal monetary value, and will engage with funeral and other 'memorialising' disputes only on an ad hoc basis, as and when they have arisen.

³⁹ One survey found that of the 94% of UK adults who hold online accounts, 75% had not considered or made arrangements for the management of their digital presence on death— The Co Operative Funeralcare, *Death in the Digital Age* (n 14).

⁴⁰ In April 2015 one of the current authors asked the 90 private client practitioners in Northern Ireland who were attending the Society of Trust and Estate Practitioners Probate Day (mainly but not exclusively solicitors) how many routinely addressed digital assets when clients were making a will. None did so.

⁴¹ Connor (n 18) 8.

⁴² As do the virtual mediums in which they 'exist'.

⁴³ Though it is still something that individual citizens should be mindful of, when contemplating the emotional and personal legacies that they leave behind.

While professional lawyers will continue to give lip service to the platitude that their primary function is to implement a client's wishes, the practical reality is that it is not (and never will be) cost-effective for a lawyer to get involved in disputes about low value personal chattels and funeral instructions, whether that dispute arises out of the real or digital world. Consequently, it is unlikely that our common law system will ever generate much, if any, jurisprudence on these aspects of the digital footprint and systematic legal regulation will inevitably have to be statutory in nature.⁴⁴

In contrast, there are other problems with potentially catastrophic consequences which could arise out of any digital estate and which should never be ignored by the reasonably competent succession lawyer. Within the last two or three years there is some evidence that this truism has now been acknowledged by the legal profession,⁴⁵ with piecemeal references to the challenges of the digital estate appearing within the standard practitioner texts,⁴⁶ even if they do tend to pose more questions than answers or do little more than raise awareness of the issues:

This is a complex area on which there is little, if any, learning or legislation at present...[A]t the very least a testator should, when making his will, compile a list of all his digital and online involvements to enable his executors to have full information of the assets of his estate and to take the appropriate action (if available) to terminate or otherwise deal with an online account or asset.⁴⁷

⁴⁴ Isolated examples have already arisen in the US- most notably the litigation involving the parents of L/Cpl Justin Ellsworth, a US Marine who was killed in Iraq, and Yahoo! The parents wanted to use emails written by their son while in Iraq to create a memorial to him, but were denied access to the email account because of Yahoo! company policy. A probate judge eventually ordered Yahoo! to hand the emails over- see the analysis in J Atwater, 'Who Owns E-Mail? Do You Have the Right to Decide the Disposition of Your Private Digital Life?' (2006) *Utah Law Review* 397. The case also attracted attention on this side of the Atlantic- see 'Who Owns Your Emails', *BBC News Online*, 11 January 2005, located at <http://news.bbc.co.uk/1/hi/magazine/4164669.stm> (accessed September 2016). In September 2012, various media outlets erroneously reported that the actor Bruce Willis was contemplating legal action against Apple so that he could leave his iTunes music collection to his daughters- see 'Bruce Willis "Considering iTunes Legal Action" Against Apple', *The Telegraph* (London, 3 September 2012) located at <http://www.telegraph.co.uk/technology/apple/9516636/Bruce-Willis-considering-iTunes-legal-action-against-Apple.html> (accessed September 2016). Although the rumours turned out to be false, the legal issues such action would have generated were explored by those writing in the area- see for example, C Wong, 'Can Bruce Willis Leave His iTunes collection to his Children: Inheritability of Digital Assets in the Face of EULAs' (2012) 20 *Santa Clara Computer and High Technology Law Journal* 703.

⁴⁵ No doubt some of this interest is motivated by self-interest. The demand for expert advice on digital assets will only increase, and those private client practitioners who are reluctant to be involved in estate planning with a digital element will cause their clients to look elsewhere.

⁴⁶ For example, the 1st Supplement of the current edition of *Williams on Wills* (RFD Barlow, RA Wallington, SL Meadway and JAD MacDougald, *Williams on Wills*, 10th edn (Butterworths, 2014)); *Butterworths' Wills Probate and Administration Service*, Paragraph 4.7; *Tolleys Administration of Estates* B3.3.

⁴⁷ *Williams on Wills* (n 46).

The reality is that all of these novel challenges for the legal profession have to be addressed and resolved in a legal vacuum, with neither legislation nor case law to assist.

The editors of *Williams on Wills* are undoubtedly correct in their assessment that, at the very least, testators should be encouraged to 'die tidily'⁴⁸ in respect of their digital estate. Lawyers need basic information about their client's online presence, and the current consensus among practitioners is to encourage testators to keep an up-to-date record of digital assets with passwords⁴⁹ and security questions left in a physically secure and sealed sideletter.⁵⁰ Solicitors generally tend to refuse to retain passwords, not least because it may be a breach of the user agreement for them to do so, and for very obvious reasons it is totally inappropriate either that passwords be recorded on the face of a will or that the document in which passwords are noted is incorporated by reference to the will, with the consequence that it becomes part of the probate documentation and is open to public inspection.⁵¹

Moreover, in a will context it is at least arguable that a solicitor or other professional will-drafter has not discharged their duty properly if he/she has not completed (and retained) an inventory of those digital assets which have a monetary value. Contentious probate disputes have increased almost exponentially in England and Wales over the last 10 years, and one of the most fundamental tenets of the *Banks v Goodfellow*⁵² test for testamentary capacity is that a testator is capable of knowing the extent and nature of his assets.

When a deceased has 'died tidily' in respect of his/her digital estate, the personal representatives at least start from the baseline that they know what exists and can therefore concentrate their time and energy on the subsequent legal and

⁴⁸ 'Which' magazine first coined the term 'dying tidily' in the pre-digital age, effectively encouraging their readership to keep a personal log of details which would make life easier for those left behind, with a pro forma provided. In 2014 the Law Society of England and Wales published a Practice Note and a form of Personal Asset Log, and the Law Society of Northern Ireland has recently undertaken a similar exercise under the auspices of its Non Contentious Business Committee.

⁴⁹ It is important that this is kept up to date. The average British citizen has 25 passwords.

⁵⁰ There is the theoretical risk that giving the means of accessing an account exposes the estate to an argument that a donatio mortis causa ('DMC') has been created in favour of the individual to whom the details have been given. It is submitted that this is insufficient indicia of title (even if the other components for a valid DMC are present)— see the discussion in N Roberts, 'Donationes Mortis Causa in a Dematerialised World' [2013] *Conveyancer & Property Lawyer* 113. It should also be noted that within the last year the English Court of Appeal has sought to reign in the DMC doctrine substantially— *King v Dubrey* [2015] EWCA Civ 581.

⁵¹ There has also been a growth in the number of proprietary software providers such as Cirrus who will store passwords and release them on the production of a death certificate to a specified person (such as an executor).

⁵² (1870) LR 5 QB 549. *Banks v Goodfellow* remains the relevant test for testamentary capacity, even post the enactment of the Mental Capacity Act 2005 – see further J Brooks, 'The Neighbour, The Carer and The Old Friend- The Complex World of Testamentary Capacity', chapter seven in this volume. The 2005 Act does not extend to Northern Ireland where the function-specific test for testamentary capacity is also that set down in *Banks v Goodfellow*.

practical minefield⁵³ of administering the digital estate. When this is not done, the family or those administering the estate are left to reconstitute the digital estate as best they can,⁵⁴ but without the traditional 'clues' of an earlier generation, namely large piles of post-death unopened post or previous correspondence retrieved from the deceased's home or workplace.

For those who do seek to engage in digital estate planning the most fundamental question is whether the benefit of a particular asset can be transmitted by will at all (or in the absence of a will, falls to be dealt with by the intestacy rules). As noted earlier, the answer is dependent on the type of asset in question and, irrespective of the content of any will, the terms of the specific service agreement. The most perfunctory review of a miscellany of such agreements discloses a bewildering array of permutations with absolutely no consistency.⁵⁵ It is imperative that those seeking to plan their digital estate, and those who advise them, have read the fine print of their service agreement but, in practice, few actually do so.⁵⁶ Most of us are guilty of clicking the 'I accept' button to online terms and conditions, without paying close attention to the precise contractual terms!

In the absence of legal regulation and notwithstanding the undeniably *sui generis* nature of many digital assets, it is submitted that the least ineffective transitional approach for lawyers (essentially the lesser of two evils), is that they should be dealt with by the deceased in a formal will.

⁵³ 78% of those who had managed a loved one's online account following their death reported difficulty in winding up the account, with 20% abandoning efforts entirely— The Co Operative Funeralcare, *Death in the Digital Age* (n 14).

⁵⁴ There is anecdotal evidence of solicitors dealing with the trail of digital chaos left by certain deceased with informal approaches to providers and 'unofficial' computer experts. Often access has been granted, eventually.

⁵⁵ The following list is not exhaustive. LinkedIn: users agree not to sell, trade or transfer their LinkedIn account to another party and LinkedIn will close the deceased user's account and remove their profile on completion of a form provided on the LinkedIn website. Twitter: users own the rights to all of the tweets which they produce but Twitter will not give personal representatives access to a deceased user's account (although it will assist personal representatives to de-activate the account). Amazon: grants a limited, non-exclusive, non-transferable licence to access and make personal and non-commercial use of Amazon, with Amazon closing down an account on being provided with a copy of the death certificate. Apple (including iTunes): the terms and conditions prohibit the account holder from renting, leasing, lending, selling, transferring, distributing or sublicensing the licensed application. The iCloud account is non-transferable and any rights to Apple ID or content within the account terminates on death. Upon receipt of a copy of a death certificate the account may be terminated and all content within deleted. Bitcoins: these are a form of digital currency which can be transferred on the death of the user and in order to do so, the password to the user's 'digital wallet' must be available to the deceased user's personal representative. If the password is lost, the bitcoins will be lost forever as there is no mechanism to retrieve a lost password. Paypal: the account holder may not transfer or assign any rights or obligations without Paypal's prior written consent and to close the account of a deceased the personal representative needs to inform Paypal and enclose a copy of the death certificate.

⁵⁶ The relevant terms of the agreements in question are not always readily accessible and notwithstanding the campaign for Plain English, they are not the easiest documents to read, even for a lawyer.

It is incontrovertible that traditional wills are not without shortcomings when it comes to the transmission of digital assets on death⁵⁷ and in the post *White v Jones*⁵⁸ era all professional will-drafters are reluctant to purport to dispose of an asset which it may later transpire is not transmissible by will at all. Although there remain so many grey areas and while some terms of service type agreements try to restrict some of the actions suggested above, it is submitted that the inclusion of specific powers to deal with the digital estate, rather than no express power (or very generalised powers), is more likely to result in some sort of response from the online service provider. One would expect a risk management aware practitioner to include the usual caveats as to the ultimate efficacy of the testamentary disposition. If difficulties do arise with the providers, the executors would be justified in applying to the court for directions.⁵⁹ Will drafters should not be held to have breached any duty of care in the current legal vacuum, so long as they can demonstrate by the will, attendance notes and the letter of retainer that they were alert to the potential difficulties. Moreover, in an era when no less than the Supreme Court has endorsed a highly intention-centric approach to the construction of wills,⁶⁰ it is unlikely that a court will seek to thwart a deceased's obvious intention without good reason.

From the perspective of the deceased's family and testamentary beneficiaries it is obviously important that assets of value are located and secured for the benefit of those intended by the deceased, and much of the popular press has concentrated on this aspect. The reasons are not simply financial ones; the point has already been made that digital assets are rapidly replacing personal possessions as items of property with a high sentimental value for the deceased's family. Being unable to access these items can be frustrating and upsetting for surviving relatives at what is already an emotionally difficult time, and risks 'the story of the life of the deceased...be[ing] lost forever'.⁶¹ The point has already been made that professional probate lawyers aim to avoid getting involved in non-commercially viable disputes such as those about funeral instructions and personal effects of only sentimental value. Yet any probate lawyer with even a modicum of experience will be acutely aware that the seeds for some of the most hostile estate

⁵⁷ The requirement for formality; also the fact that digital assets change more frequently than other personality and may fall foul of the traditional doctrine of ademption.

⁵⁸ [1995] UKHL 5.

⁵⁹ On which see further below.

⁶⁰ *Marley v Rawlings* [2014] UKSC 2, [2015] AC 129. The ratio of the decision involves the extension of statutory rectification of wills to the 'mixed up' wills of a husband and wife and an expansive interpretation of the concept of a clerical error. Arguably of even more interest are the obiter comments of the Supreme Court to the effect that wills should be construed in the same manner as commercial contracts, and that 'context is everything'.

⁶¹ Beyer and Cahn (n 12) 140, the authors making the point that this is 'not only a tragedy for family members, but also possibly for future historians who are losing pieces of history in the digital abyss'.

litigation are sown immediately after death in the emotively charged atmosphere of loved ones, inevitably jostling to secure their new role in a differently constituted family, arranging the funeral and memorialisation of the deceased. It is in no-one's interest that the law adds even more heat but no light.

Another important point is that academic lawyers have a tendency to view the law of succession primarily from the perspective of the deceased property owner and the beneficiaries, rather than that of the personal representatives. In fact, however, it is the unenviable position of the personal representative (and his/her lawyer)⁶² that has generated the most intractable legal difficulties in practice in respect of digital estates and the impetus for legislative intervention in the United States⁶³ came initially from the desire to ensure that personal representatives, trustees and other fiduciaries (such as those acting under a Lasting Power of Attorney or an Enduring Power of Attorney) were in a position to manage assets properly and without exposure to personal or criminal liability.

The role of personal representatives in developing jurisprudence in the field of succession law in our common law system should not be underestimated. It has long been accepted that succession law experienced something of a 'dark age' in the British Isles for a period from the mid-1980s,⁶⁴ with a complete dearth of seminal case law. Today, it is heartening that succession law is again appearing on the law reform agenda, even though reported cases that establish new principles (the burgeoning testamentary negligence jurisprudence apart) remain relatively rare. Those that do arise often have their genesis in a neutral personal representative, sometimes an insured professional, seeking directions from the court.⁶⁵ One suspects that if England and Wales chooses not to enact legislation but to rely solely on the common law to develop and delineate the scope of the doctrines which govern the transmissibility of the digital estate on death, it is highly likely that much of the jurisprudence will be generated by personal representatives seeking such directions.

It is trite law that a personal representative is liable to the extent that property within the estate comes into his/her hands or should come into his/her possession if they took reasonable steps in relation to it. *Prima facie* it falls to the

⁶² And, in turn, his/her professional indemnity policy!

⁶³ Discussed in Part V below.

⁶⁴ See, for example, the comments made by Professor Gareth Miller in his preface to the second edition of *The Machinery of Succession*, 2nd edn (Dartmouth, 1956). Professor Miller was one of only a handful of academics that specialised in succession law during this period. As Professor Miller points out, the position in Australasia during this period was in stark contrast, with numerous law reform projects being published.

⁶⁵ An English illustration is the important decision on the application of the doctrine of ademption where the asset that has been specifically devised has been disposed of by an attorney— *Banks v National Westminster Bank* [2006] WTLR 1693. In Northern Ireland the only reported decision on the succession law aspects of the Single Farm Payment Scheme that operated for 10 years between 2005 and 2015, *Crossey v Armour* [2008] NI Ch 4, started of life as an executor's application for directions.

personal representative to identify such assets and then take appropriate steps to secure them, where the nature of the asset requires the personal representative to do so. If the personal representative causes unreasonable loss to the estate he/she will be liable for *devastavit*, and it takes little imagination to come up with illustrations of such loss in a digital context. Consider the unexpected death of the keyman individual of a small business. Delay in accessing fundamental information which is held online in respect of a small business may sound the death knell for that business's very survival. What of the personal representative who distributes the deceased's estate before becoming aware of the large online gambling debts which render the estate insolvent? Or the personal representative who is facing penalties from HMRC for a negligent inheritance tax return because he/she is considered not to have properly investigated the extent of the digital estate? What if the personal representative's alleged failure to safeguard the digital estate on death has resulted in various losses caused by a consequential identify theft?

Often the personal representative is not the most appropriate person to 'deal' with the digital estate on death, particularly if he/she is not particularly computer savvy. With this in mind, the suggestion has been made by several legal commentators that it may be more appropriate to have a separate 'digital executor'.⁶⁶ The concept of 'specialist' executors whose responsibility and authority is limited to a particular type of asset has long been adopted in respect of the literary executor and the administration of a testator's copyright, which shares many characteristics with some components of the digital estate. There is no reason, in theory, why a similar division of function could not operate in respect of digital assets. It is important, however, not to confuse the role of an individual who is merely tasked by a deceased with collating and managing his/her digital information on death (often on the basis of their expertise with computers) with a legal personal representative who carries the full mantle of that office's responsibilities and liabilities. The inter-relationship between any so-called 'digital executor' and the individuals to whom the grant of representation has been issued would have to be given careful consideration.

Finally, in common law systems, legal regulation of transmission of digital assets on death is muddled by the fact that while intellectual property rights uncontroversially transmit to the beneficiaries on foot of a will or to the statutory next-of-kin, there is little recognition of privacy or reputational rights after death.⁶⁷ Terms of service agreements between online service providers and account holders have privacy interests at their core- and these are often cited as the basis for such

⁶⁶ See Connor (n 18) 15 and N Cahn, "Postmortem Life On-Line" (2011) 25 *Property & Probate* 36, 38.

⁶⁷ Most obviously the dead have no reputation and cannot be libeled.

severe restrictions and prohibitions on the transfer of digital assets on death.⁶⁸ One could argue that this rationale is somewhat flawed; privacy interests generally cease on death, removing the prospect of the online service provider being exposed to liability through a potential breach of privacy action (unless the terms-of-service agreement specifically provides that it will maintain the user's privacy in the event of his/her death). Broader privacy interests also come into play when someone is deciding what they want to happen to their digital assets after their own demise. An individual might want sentimental items (eg. photographs) to pass on to the family, or surviving relatives to have access to digital assets such as online bank accounts; but the same individual may also want certain things to be permanently deleted (eg. secret emails from a lover, personal diaries). As with any other assets, lawyers must ascertain and effectuate their client's wishes.⁶⁹

V. LOOKING AHEAD: LESSONS FROM ELSEWHERE?

When looking at digital assets and the future of estate planning in the UK, two things are striking: a dearth of legal commentary on the topic⁷⁰ and the absence of specific laws dealing with the key issues. The contrast with the United States is stark, where there is a wealth of scholarship on digital assets⁷¹ and legislative changes have already been introduced in a number of states. For example, Oklahoma gives the deceased's executor a right to access specific online accounts,⁷² while Idaho allows the deceased's executors or personal representatives to access a wide range of digital assets- including accounts on social networking sites, and blogs.⁷³ While undoubtedly viewed as a step in the right direction, these laws are not without their limitations: the pace of technological change and constant emergence of new forms of digital assets renders these statutes obsolete within a relatively short space of time (they have a limited legal shelf-life), and not all of them address the contractual relationship

⁶⁸ See generally L Edwards and E Harbinja, 'Protecting Post-Mortem Privacy: Reconsidering the Privacy Interests of the Deceased in a Digital World' (2013) 32 *Cardozo Arts & Entertainment Law Journal* 1.

⁶⁹ Cahn (n 66) 39.

⁷⁰ There are only passing references in one or two of the leading succession law texts (see Part IV), and specific articles on the topic are hard to find.

⁷¹ See for example, Beyer and Cahn (n 12), Varnado (n 1), Hopkins (n 15), and most of the other academic sources cited thus far. Other examples include M Perrone, 'What Happens When We Die: Estate Planning of Digital Assets' (2012) 21 *CommLaw Conspectus* 185; N Cahn, 'Probate Law Meets the Digital Age' (2014) 67 *Vanderbilt Law Review* 1697; MD Roy, 'Beyond the Digital Assets Dilemma: Will Online Services Revolutionize Estate Planning?' (2011) 24 *Quinnipiac Probate Law Journal* 376; E Carroll and J Romano, *Your Digital Afterlife: When Facebook, Flickr and Twitter Are Your Estate, What's Your Legacy?* (Berkeley, CA, New Riders, 2011); and AB Lopez, 'Death and the Digital Age: The Disposition of Digital Assets' (2016) 3 *Savannah Law Review* 77.

⁷² See the discussion in Hopkins (n 15) 240-241.

⁷³ Beyer and Cahn (n 12) 144 (though see 140-146 for an overview of other statutes passed in several US states and how these have evolved over a relatively short period of time (in legal years) to meet the challenges posed by new technologies and the emergence of new forms of digital assets).

between online service providers and account holders which governs the basic terms of access and transmissibility of assets.⁷⁴

The most recent (and most significant) legislative development, however, is the Uniform Fiduciary Access to Digital Assets Act ('UFADAA'). Released in 2015, this was intended to give fiduciaries such as personal representatives, executors and trustees the authority and ability to access the deceased's online accounts (and in doing so, to perform their basic legal duty to deal with and distribute the deceased's estate).⁷⁵ The Act defines digital assets as 'electronic records, not including an underlying asset or liability unless the asset or liability is itself a record that is electronic' (not easy to understand at first glance, at least not for the technologically-challenged!), and grants fiduciaries the same rights to access digital assets as the account holder- but only for the purpose of discharging their fiduciary duties.⁷⁶ The reasons can range from gathering together the estate assets, to preventing identity theft, and (apparently) consoling grieving relatives.⁷⁷ Obstacles still remain: fiduciaries need to have the deceased's passwords to gain entry, copyright and privacy laws might restrict what they can do with the asset (if they access it) and service providers can still unilaterally remove or destroy individual entries.⁷⁸ Approved by the Uniform Law Commission in the US,⁷⁹ individual states must actively decide whether or not to enact the UFADAA, though initial signs are encouraging with several states having adopted the measure to date or enacting something substantially the same. Cahn, Kunt and Walsh explain the Act's success in the following terms:

UFADAA seeks to place the fiduciary into the shoes of the account holder through a variety of provisions, resolving as many of the impediments to fiduciary access to digital assets as possible: it defines digital assets, provides default rules, defers to account holder intent and privacy desires, and encourages custodian compliance. It (1) specifies that the fiduciary is deemed to have the account holder's lawful consent...; (2) clarifies that if any digital material was illegally obtained by the decedent, then the fiduciary's attempt to take control of it will not 'launder' it to pass clean title to the heirs; and (3) sidesteps contentious

⁷⁴ Beyer and Cahn (n 12) 146-147.

⁷⁵ For an overview, see V Blachly, 'Uniform Fiduciary Access to Digital Assets Act' (2015) 29 *Probate & Property Magazine*, located at http://www.americanbar.org/publications/probate_property_magazine_2012/2015/july_august_2015/2015_aba_rpte_pp_v29_3_article_blachly_uniform_fiduciary_access_to_digital_assets_act.html (accessed September 2016). See also J Lee, 'Death and Live Feeds: Privacy Protection in Fiduciary Access to Digital Assets' (2015) *Columbia Business Law Review* 654 and N Cahn, C Kunz and S Brown Walsh, 'Digital Assets and Fiduciaries', *GWU Legal Studies Research Paper* (No. 2015-18).

⁷⁶ The Act does not grant personal access, nor does it allow fiduciaries to 'impersonate' the account holder- Cahn, Kunz and Walsh (n 75) 19.

⁷⁷ See the discussion in Blachly (n 75).

⁷⁸ Again, see the discussion in Blachly (n 75).

⁷⁹ The Uniform Law Commission was established in the US in 1892, and provides states with 'non-partisan, well-conceived and well-drafted legislation that brings clarity and stability to critical areas of state statutory law'- see <http://www.uniformlaws.org/Default.aspx> (accessed September 2016).

issues about whether a fiduciary can challenge restrictive terms of service precluding transfer or specifying choice of law.⁸⁰

Whether a similar legal framework is introduced on this side of the Atlantic remains to be seen, though the European Law Institute is currently establishing a joint study group with the Uniform Law Commission in the US to see if the UFADAA could be used as a model for European legislation.⁸¹

Within the UK, the Law Commission for England and Wales may address the issue of digital assets as part of a forthcoming wills project, which probably means that legislative reform is some way off.⁸² Much will depend on the succession law implications of digital assets capturing the respective legal and public imaginations in the years to come. Social pressure will come from surviving family and friends who are unable to access digital assets following the account holder's demise;⁸³ this may have financial consequences, but is more likely to result in the loss of the deceased's personal (and historical) legacy. Within the legal profession, the initial impetus for reform will come from lawyers who- faced with a confusing array of user policies and virtually no legal authority on the subject- are struggling to advise clients on the post-mortem fate of their digital assets. There is some movement here already, and one of the most active proponents for reform globally has been the Society of Trust and Estate Practitioners (STEP).⁸⁴ STEP's Mental Capacity Special Interest Group created a Digital Assets Working Group in 2013⁸⁵ with a view to clarifying the issues relating to the access and ownership of digital assets following the death or incapacity of the registered owner. The ultimate aims are to create a best-practice template policy protocol to be consistently adopted by online providers, to assist in the management of digital assets by fiduciaries and to consider the creation of legislation for adoption and harmonisation by all state and national parliaments where STEP is active. Judicial calls for reform are also likely,

⁸⁰ Cahn, Kunz and Walsh (n 75) 18. Lee (n 75) also suggests that the Act's success is largely down to its 'asset neutral' approach in that it treats digital assets in the same way as physical assets for estate administration purposes- though she is ultimately critical of this approach.

⁸¹ The objective is to explore a model law for Member-States; for an overview of the initiative, see P Szulewski, *Digital Legacy - Is it Possible to Transfer Digital Assets in Case of Death?* (6 October 2015), located at <https://ec.europa.eu/digital-single-market/en/content/digital-legacy-it-possible-transfer-digital-assets-case-death> (accessed September 2016). We are grateful to Prof dr Sjef van Erp of the European Law Institute for drawing our attention to this initiative.

⁸² As with any law reform process, stakeholder engagement will be essential, given that online service providers will have their own concerns around the intended usage of data and allowing others (beyond the account holder) to access it.

⁸³ Examples have already been publicised- see 'Father Told by Apple to Get Court Order for Dead Son's Data', *BBC News Online* (29 July 2016) located at <http://www.bbc.co.uk/news/uk-england-coventry-warwickshire-36926812> (accessed September 2016).

⁸⁴ STEP was created in 1991 and now has over 20,000 members and over 100 branches worldwide, including one in Northern Ireland which was established in 2007. It is represented throughout Europe, North America and the Caribbean.

⁸⁵ Chaired by Rod Genders, a senior Australian lawyer.

when courts are eventually tasked with the interpretation and enforcement of terms of service agreements which restrict inheritance rights.

The UFADAA is one possible model, though other options for reforming the law may yet emerge. Two considerations will be paramount when drafting any new legislative scheme: sufficient flexibility to deal with an array of digital assets and their various uses, while making it easier for personal representatives to access and deal with them by conferring the requisite legal authority.⁸⁶ Broader 'territorial issues' will also be an important factor. While 'High Street' succession law had traditionally been insulated from private international law, ownership of holiday homes abroad and increased mobility (together with Brussels IV)⁸⁷ have already brought the substantive and procedural laws of other jurisdictions into sharp focus. It will now be virtually impossible for even the most 'insulated' probate practitioner to ignore extra-territorial issues, not least because many providers are based in the United States, where the Patriot Act 2001 and the National Security Agency's Prism Project must be addressed in respect of privacy and confidentiality.⁸⁸ The fact that digital assets can be located across an array of virtual places and held by a range of service providers operating through global companies leads to complex multi-jurisdictional legal issues.⁸⁹ The traditional starting point of the territory in which the deceased was domiciled at the time of his/her death may be irrelevant if there is an express stipulation about which country's laws apply in the terms of service agreement. The latter would govern post-mortem access to digital assets, making comprehensive and meaningful reform impossible to achieve without a joined up international approach.

VI. CONCLUSION

Succession lawyers are entering new and unfamiliar territory; this, in itself, is not a novel experience, but the pace of change and the rapidly expanding categories of digital assets are leaving little time to catch up. As more people are dying in the digital age, families and estate administrators are starting to realise the digital mess that has been left behind. In 2014, Varnado sounded a cautionary note,

⁸⁶ A consistent set of user policies and standard service provider norms seems unlikely.

⁸⁷ Regulation 650/2012 (or Brussels IV as it is colloquially known) is intended to help with cross-border successions, by unifying the succession laws which apply to an individual estate (the default position is that inheritance issues are governed by the law of the State in which the deceased was habitually resident). Both the UK and Ireland have opted out, but the Treaty nonetheless can have implications for testators in both jurisdictions who own assets elsewhere.

⁸⁸ For example, the latter is effectively a surveillance programme that allows the National Security Agency to retrieve data directly from major US internet companies (including Google, Microsoft and Yahoo!).

⁸⁹ See the general discussion in W Moncur, 'Digital Ownership Across Lifespans' in D Prendergast and C Garattini (eds), *Aging and the Digital Life Course* (NY, Berghahn Books, 2015) ch 13.

warning that 'the problems have not reached epic proportions, but that day is coming, and eventually, the digital footprint issue will become a serious problem'.⁹⁰

Digital assets cross the boundaries between the tangible and the intangible, and between property law, succession law, intellectual property law, contract law and privacy law. They are the 'new' new property; and barring specific legislative changes, succession law will have to encompass them within existing legal frameworks while making the necessary adjustments for the complex regulatory agreements that accompany digital assets and being mindful of the competing interests of all the different parties involved- namely the account holders, their families and beneficiaries, the online service providers, and society more generally. There is a significant degree of uncertainty and confusion around digital assets, and, because of the legal and technical issues they raise, specific laws may have to be enacted in the future. In the meantime, individuals should be encouraged to plan for the future and to leave clear directions for what they want to happen to their digital estates post-mortem.

⁹⁰ Varnado (n 1) 719.